

K-25/2/110

7626/N

Total No. of sheet used : ~~2~~ Total No. of Questions ~~5~~  
Subject : Computer System Organization and Architecture  
Class : ~~2~~ 3<sup>rd</sup> Semester  
Paper : BCA-214  
Title of Paper : Computer System Organization and Architecture  
Time Allowed : 3 Hours  
Maximum Marks: 75

**Note:** Candidates are required to attempt five questions in all selecting at least two questions each from sections A and B. Section C is compulsory.

**SECTION A**

- Q1. Discuss the following in detail 15  
a) Instruction level parallelism  
b) Processor level parallelism  
Q2. Explain the various addressing modes with the help of suitable examples. 15  
Q3. What do you mean by data transfer and manipulation instructions? Explain 15  
any four with suitable examples.  
Q4. What do you mean by an interrupt? Discuss various types of interrupt and 15  
discuss interrupt cycle in detail.

**SECTION B**

- Q5. What do you mean by Register Transfer Language? Discuss with the help 15  
of suitable examples various register transfer operations and micro  
operations.  
Q6. What is input-output organization? Discuss in detail. 15  
Q7. Discuss the following in detail  
a) Strobe control 7.5  
b) Handshaking 7.5  
Q8. What is DMA data transfer? In what circumstances this scheme of data 15  
transfer is employed? What are burst mode and cycle stealing in DMA  
scheme?

**SECTION C**

- Q9. a) What are the design principles for modern computers? 03  
b) What is cache memory? 03  
c) Differentiate between primary memory and secondary memory. 03  
d) What is the use of Register Transfer Language? 03  
e) What are the salient features of interrupt initiated I/O? 03